WHAT IS CLAIMED IS:

1. An image output control system comprising an image processing device that makes image data subjected to a preset series of image processing, and an image output device that creates dots according to a result of the preset series of image processing to output an image,

said image processing device comprising:

a pixel group setting module that sets a pixel group having a predetermined number of multiple pixels included in the image;

a characteristic detection module that detects a characteristic of the pixel group;

a dot formation data generation module that selects a technique corresponding to the detected characteristic of the pixel group among multiple techniques provided as possible options and generates dot formation data with regard to the pixel group according to the selected technique, where the dot formation data represents either a number of dots to be created in the pixel group or positions of dot formation; and

a control data output module that outputs the dot formation data with identification information for identifying the selected technique, as control data to said image output device,

said image output device comprising:

a control data receiving module that receives the output control data;

a priority order specification module that specifies a priority order of individual pixels in the pixel group for dot creation;

a pixel position determination module that refers to the identification information and determines positions of dot-on pixels in the pixel group, based on the control data and the specified priority order; and

a dot formation module that creates dots at the determined positions of

dot-on pixels.

2. An image output control system in accordance with claim 1, wherein the detected characteristic of the pixel group is presence or absence of an edge in the pixel group, and the multiple techniques provided as possible options include one technique that is applied to a pixel group with no edge and collectively determines the number of dots to be created in the pixel group, and another technique that is applied to a pixel group with an edge and individually determines the number of dots to be created in each of smaller units as divisions of the pixel group.

3. An image output control system in accordance with claim 1, wherein said characteristic detection module determines that a pixel group includes an edge when a tone difference of the image data between pixels in the pixel group is not less than a preset level,

said dot formation data generation module comprises:

a dot number determination module that is activated in response to determination that the pixel group does not include an edge, to determine the number of dots to be created in the pixel group with no edge as dot number data, based on image data representing the pixel group; and

a dot data generation module that is activated in response to determination that the pixel group includes an edge, to determine dot on-off state of individual pixels included in the pixel group with an edge, based on image data of the individual pixels, and to generate dot data representing positions of dot-on pixels in the pixel group,

said control data output module comprises a number data output module that outputs the dot number data regarding the pixel group with no edge, with the dot data regarding the pixel group with an edge, to said image output device,

said control data receiving module comprises a number data receiving module that receives the dot data with the dot number data, and

said pixel position determination module determines the positions of the dot-on pixels with regard to the pixel group with no edge according to the dot number data and the specified priority order, while determining the positions of the dot-on pixels with regard to the pixel group with an edge according to the dot data.

4. An image output control system in accordance with claim 1, wherein said priority order specification module comprises:

a priority order storage module that stores multiple options for the priority order of individual pixels in the pixel group for dot creation; and

a priority order selection module that selects one out of the stored multiple options for the priority order every time the output dot formation data is received with regard to the pixel group.

5. An image output control system in accordance with claim 3, wherein said number data output module outputs the dot number data and the dot data to said image output device in such a manner that the dot number data and the dot data are arranged in a sequence of pixel groups and that data representing a larger value than the predetermined number of multiple pixels included in each pixel group is inserted between each dot data and precedent data output immediately before the dot data, and

said number data receiving module receives the data representing the larger value than the predetermined number of multiple pixels included in the pixel group and determines that the received data is not the dot number data but indicates presence of subsequent dot data.

6. An image output control system in accordance with claim 3, wherein said number data output module outputs discrimination information simultaneously with the dot number data and the dot data to said image output device, where the discrimination information discriminates the dot data from the dot number data, and

said number data receiving module receives the dot number data and the dot data in a discriminative manner on the basis of the discrimination information.

7. An image output device that receives processed image data, which has gone through a preset series of image processing, and creates dots according to the received image data to output an image, said image output device comprising:

a control data receiving module that receives dot formation data and identification information as control data with regard to a pixel group having a predetermined number of multiple pixels included in the image, where the dot formation data is generated according to one technique selected corresponding to a detected characteristic of the pixel group to represent either a number of dots to be created in the pixel group or positions of dot formation and the identification information identifies the selected technique;

a priority order specification module that specifies a priority order of individual pixels in the pixel group for dot creation;

a pixel position determination module that refers to the identification information and determines positions of dot-on pixels in the pixel group, based on the dot formation data and the specified priority order; and

a dot formation module that creates dots at the determined positions of dot-on pixels.

8. An image output device in accordance with claim 7, wherein said control data receiving module receives either dot number data representing the number of dots to be created in the pixel group or dot data representing dot on-off state of individual pixels included in the pixel group as the dot formation data, simultaneously with discrimination information that discriminates the dot data from the dot number data, and

said pixel position determination module identifies the received dot formation data as the dot number data according to simultaneously received the discrimination information, and determines the positions of the dot-on pixels in the pixel group, based on the dot number data and the specified priority order.

9. An image output device in accordance with claim 7, wherein the discrimination information is a specific bit value of the dot formation data.

10. An image processing device that causes input image data representing an image to go through a preset series of image processing and thereby generates control data, which is used for control of dot formation by an image output device that creates dots and outputs a resulting processed image, said image processing device comprising:

a pixel group setting module that sets a pixel group having a predetermined number of multiple pixels included in the image;

a characteristic detection module that detects a characteristic of the pixel group;

a dot formation data generation module that selects a technique corresponding to the detected characteristic of the pixel group among multiple techniques provided as possible options and generates dot formation data with regard to the pixel group according to the selected technique, where the dot formation data represents either a number of dots to be created in the pixel

group or positions of dot formation; and

a control data output module that outputs the dot formation data with identification information for identifying the selected technique, as the control data to said image output device.

11. An image processing device in accordance with claim 10, wherein the detected characteristic of the pixel group is presence or absence of an edge in the pixel group, and the multiple techniques provided as possible options include one technique that is applied to a pixel group with no edge and collectively determines the number of dots to be created in the pixel group, and another technique that is applied to a pixel group with an edge and individually determines the number of dots to be created in each of smaller units as divisions of the pixel group.

12. An image processing device in accordance with claim 10, wherein said characteristic detection module determines that a pixel group includes an edge when a tone difference of the image data between pixels in the pixel group is not less than a preset level,

said dot formation data generation module comprises:

a dot number determination module that is activated in response to determination that the pixel group does not include an edge, to determine the number of dots to be created in the pixel group with no edge as dot number data, based on image data representing the pixel group; and

a dot data generation module that is activated in response to determination that the pixel group includes an edge, to determine dot on-off state of individual pixels included in the pixel group with an edge, based on image data of the individual pixels, and to generate dot data representing positions of dot-on pixels in the pixel group, and

said control data output module comprises a number data output module that outputs the dot number data regarding the pixel group with no edge, with the dot data regarding the pixel group with an edge, to said image output device.

13. An image processing device in accordance with claim 12, wherein said control data output module outputs the control data to said image output device in such a manner that the dot number data and the dot data are arranged in a sequence of pixel groups and that discrimination data representing a larger value than the predetermined number of multiple pixels included in each pixel group is inserted between each dot data and precedent data output immediately before the dot data.

14. An image output control method that makes image data subjected to a preset series of image processing and creates dots according to a result of the preset series of image processing to output an image,

said image output control method comprising:

a first step of setting a pixel group having a predetermined number of multiple pixels included in the image;

a second step of detecting a characteristic of the pixel group;

a third step of selecting a technique corresponding to the detected characteristic of the pixel group among multiple techniques provided as possible options and generating dot formation data with regard to the pixel group according to the selected technique, where the dot formation data represents either a number of dots to be created in the pixel group or positions of dot formation;

a fifth step of specifying a priority order of individual pixels in the pixel group for dot creation;

a sixth step of referring to identification information and determining

positions of dot-on pixels in the pixel group, based on the control data and the specified priority order; and

a seventh step of creating dots at the determined positions of dot-on pixels.

15. An image output control method in accordance with claim 14, wherein the detected characteristic of the pixel group is presence or absence of an edge in the pixel group, and the multiple techniques provided as possible options include one technique that is applied to a pixel group with no edge and collectively determines the number of dots to be created in the pixel group, and another technique that is applied to a pixel group with an edge and individually determines the number of dots to be created in each of smaller units as divisions of the pixel group.

16. An image output control method in accordance with claim 14, wherein said second step determines that a pixel group includes an edge when a tone difference of the image data between pixels in the pixel group is not less than a preset level,

said third step comprises:

an eighth step of, in response to determination that the pixel group does not include an edge, determining the number of dots to be created in the pixel group with no edge as dot number data, based on image data representing the pixel group; and

a ninth step of, in response to determination that the pixel group includes an edge, determining dot on-off state of individual pixels included in the pixel group with an edge, based on image data of the individual pixels, and to generate dot data representing positions of dot-on pixels in the pixel group, and

said sixth step determination module determines the positions of the

dot-on pixels with regard to the pixel group with no edge according to the dot number data and the specified priority order, while determining the positions of the dot-on pixels with regard to the pixel group with an edge according to the dot data.

17. An image output method that receives processed image data, which has gone through a preset series of image processing, and creates dots according to the received image data to output an image, said image output method comprising the steps of:

(A) receiving dot formation data and identification information as control data with regard to a pixel group having a predetermined number of multiple pixels included in the image, where the dot formation data is generated according to one technique selected corresponding to a detected characteristic of the pixel group to represent either a number of dots to be created in the pixel group or positions of dot formation and the identification information identifies the selected technique;

(B) specifying a priority order of individual pixels in the pixel group for dot creation;

(C) referring to the identification information and determining positions of dot-on pixels in the pixel group, based on the dot formation data and the specified priority order; and

(D) creating dots at the determined positions of dot-on pixels.

18. An image processing method that causes input image data representing an image to go through a preset series of image processing and thereby generates control data, which is used for control of dot formation by an image output device that creates dots and outputs a resulting processed image, said image processing method comprising the steps of:

(a) setting a pixel group having a predetermined number of multiple pixels included in the image;

(b) detecting a characteristic of the pixel group;

(c) selecting a technique corresponding to the detected characteristic of the pixel group among multiple techniques provided as possible options and generating dot formation data with regard to the pixel group according to the selected technique, where the dot formation data represents either a number of dots to be created in the pixel group or positions of dot formation; and

(d) outputting the dot formation data with identification information for identifying the selected technique, as the control data to said image output device.

19. An image processing method in accordance with claim 18, wherein the detected characteristic of the pixel group is presence or absence of an edge in the pixel group, and the multiple techniques provided as possible options include one technique that is applied to a pixel group with no edge and collectively determines the number of dots to be created in the pixel group, and another technique that is applied to a pixel group with an edge and individually determines the number of dots to be created in each of smaller units as divisions of the pixel group.

20. A computer program product comprising a medium and an image output control program stored therein, the image output control program is executed by a computer to make image data subjected to a preset series of image processing, create dots according to a result of the preset series of image processing, and thereby output an image,

wherein said image output control program comprises:

a first program code for setting a pixel group having a predetermined

number of multiple pixels included in the image;

a second program code for detecting a characteristic of the pixel group;

a third program code for selecting a technique corresponding to the detected characteristic of the pixel group among multiple techniques provided as possible options and generating dot formation data with regard to the pixel group according to the selected technique, where the dot formation data represents either a number of dots to be created in the pixel group or positions of dot formation;

a forth program code for specifying a priority order of individual pixels in the pixel group for dot creation;

a fifth program code for referring to identification information and determining positions of dot-on pixels in the pixel group, based on the control data and the specified priority order; and

a sixth program code for creating dots at the determined positions of dot-on pixels.

21. A computer program product comprising a medium and an image output control program stored therein, the image output program is executed by a computer to receive processed image data, which has gone through a preset series of image processing, create dots according to the received image data, and thereby output an image,

wherein said image output program comprises:

a first program code for receiving dot formation data and identification information as control data with regard to a pixel group having a predetermined number of multiple pixels included in the image, where the dot formation data is generated according to one technique selected corresponding to a detected characteristic of the pixel group to represent either a number of dots to be created in the pixel group or positions of dot formation and the identification

information identifies the selected technique;

a second program code for specifying a priority order of individual pixels in the pixel group for dot creation;

a third program code for referring to the identification information and determining positions of dot-on pixels in the pixel group, based on the dot formation data and the specified priority order; and

a forth program code for creating dots at the determined positions of dot-on pixels.

22. A computer program product comprising a medium and an image output control program stored therein, the image processing program is executed by a computer to make input image data representing an image subjected to a preset series of image processing and thereby generate control data, which is used for control of dot formation by an image output device that creates dots and outputs a resulting processed image,

wherein said image processing comprises:

a first program code for setting a pixel group having a predetermined number of multiple pixels included in the image;

a second program code for detecting a characteristic of the pixel group;

a third program code for selecting a technique corresponding to the detected characteristic of the pixel group among multiple techniques provided as possible options and generating dot formation data with regard to the pixel group according to the selected technique, where the dot formation data represents either a number of dots to be created in the pixel group or positions of dot formation; and

a forth program code for outputting the dot formation data with identification information for identifying the selected technique, as the control data to said image output device.

23. An image output control system comprising an image processing device that makes image data subjected to a preset series of image processing, and an image output device that creates dots according to a result of the preset series of image processing to output an image,

said image processing device comprising:

a generator that sets a pixel group having a predetermined number of multiple pixels included in the image;

a detector that detects a characteristic of the pixel group;

a data operator that selects a technique corresponding to the detected characteristic of the pixel group among multiple techniques provided as possible options and generates dot formation data with regard to the pixel group according to the selected technique, where the dot formation data represents either a number of dots to be created in the pixel group or positions of dot formation; and

a data transmitter that outputs the dot formation data with identification information for identifying the selected technique, as control data to said image output device,

said image output device comprising:

a receiver that receives the output control data;

a priority order operator that specifies a priority order of individual pixels in the pixel group for dot creation;

a position operator that refers to the identification information and determines positions of dot-on pixels in the pixel group, based on the control data and the specified priority order; and

a dot creator that creates dots at the determined positions of dot-on pixels.

24. An image output device that receives processed image data, which has gone through a preset series of image processing, and creates dots according to the received image data to output an image, said image output device comprising:

a receiver that receives dot formation data and identification information as control data with regard to a pixel group having a predetermined number of multiple pixels included in the image, where the dot formation data is generated according to one technique selected corresponding to a detected characteristic of the pixel group to represent either a number of dots to be created in the pixel group or positions of dot formation and the identification information identifies the selected technique;

a priority order operator that specifies a priority order of individual pixels in the pixel group for dot creation;

a position operator that refers to the identification information and determines positions of dot-on pixels in the pixel group, based on the dot formation data and the specified priority order; and

a dot creator that creates dots at the determined positions of dot-on pixels.

25. An image processing device that causes input image data representing an image to go through a preset series of image processing and thereby generates control data, which is used for control of dot formation by an image output device that creates dots and outputs a resulting processed image, said image processing device comprising:

a generator that sets a pixel group having a predetermined number of multiple pixels included in the image;

a detector that detects a characteristic of the pixel group;

a data operator that selects a technique corresponding to the detected

characteristic of the pixel group among multiple techniques provided as possible options and generates dot formation data with regard to the pixel group according to the selected technique, where the dot formation data represents either a number of dots to be created in the pixel group or positions of dot formation; and

a data transmitter that outputs the dot formation data with identification information for identifying the selected technique, as control data to said image output device.